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(54) Radiation detector for tympanic temperature measurement.

(57) Tympanic temperature measurements are obtained from the output of a thermopile (28) mounted in an extension (18) from a housing (14). The housing (14) has a temperature display (16) thereon and supports the electronics for responding to sensed radiation. A disposable plastic sheet (42) taken from a tape of such sheets stretches over the end of the extension (18) between side posts (52,54). The thermopile (28) is mounted in a highly conductive thermal mass (34,36) which includes waveguide tube (32). A low conductivity gaseous environment surrounding the thermopile (28) extends through the tube (32). The electronics include an EEPROM (100) in which both calibration and characterisation information may be stored during a calibration procedure through an optical coupling (104). A capacitor (C1) and transistor (T1) associated with a switch (22) form a simple watchdog circuit.

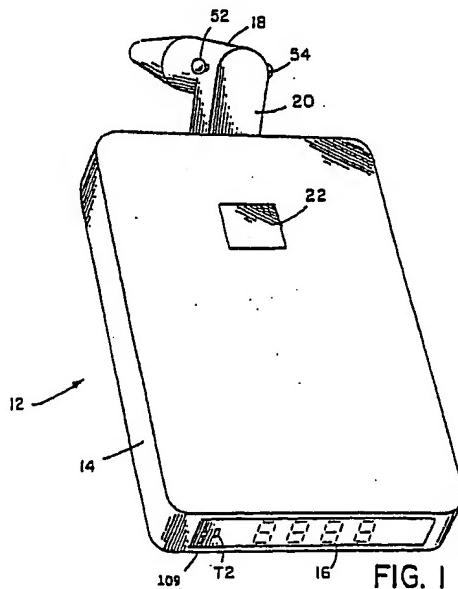


FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
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A	--	1-19	TECHNICAL FIELDS SEARCHED (Int. Cl.6)
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A	DE, B2, 1914468 (SIEMENS AG.), 8 April 1976 (08.04.76) * see the whole document *	1-19	
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The present search report has been drawn up for all claims			
Place of search STOCKHOLM	Date of completion of the search 4 February 1997	Examiner LARS JAKOBSSON	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.6)
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A	GB, A, 1425765 (A.SCHILLER), 18 February 1976 (18.02.76) * see the whole document *	1-19	
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A	EP, A2, 0092535 (MINITUBE AKTIEBOLAG), 26 October 1983 (26.10.83) * figure 1, abstract *	1-19	TECHNICAL FIELDS SEARCHED (Int. Cl.6)
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
STOCKHOLM	4 February 1997	LARS JAKOBSSON	
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T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document			